CLAIMS

1. An L chain variable region (V region) of an antibody to human medulloblastoma cells, comprising three complementarity determining regions (CDRs) having the amino acid sequences defined below:

CDR1: (SEQ ID NO. 118) Lys Ala Ser Gln Asn Val Gly

Thr Asn Val Ala

CDR2: (SEQ ID NO. 119) Ser Ala Ser Tyr Arg Tyr Ser

CDR3: (SEQ ID NO. 120) Gln Gln Tyr Asn Ser Tyr Pro

Arg Ala

or a portion thereof and four framework regions (FRs).

40. A method for making a reshaped human antibody comprising complementarity determining regions derived from a mouse antibody and framework regions derived from a human antibody, wherein an amino acid residue 46 of L chain numbered according to Kabat et al. is a mouse antibody residue and the reshaped human antibody creates a functional antigen binding site.

41. The method of claim 40, wherein an amino acid residue 94 of H chain numbered according to Kabat et al. is an additional mouse antibody residue.

42. The method of claim 41, wherein amino acid residues 27, 28, 29 and 30 of H chain numbered according to Kabat et al. are additional mouse antibody residues.

43. The method of claim 40, wherein the amino acid residue 46 is proline.

44. A reshaped human antibody produced by the method of claim 40.

45. A reshaped human antibody produced by the method of claim 41.

46. A reshaped human antibody produced by the

method of claim 42.

47. A reshaped human antibody produced by the method of claim 43.

48. A method for making a single-chain Fv region comprising a reshaped human antibody H chain V region and L chain V region, which are linked by a linker peptide, and have complementarity determining regions derived from a mouse antibody and framework regions derived from a human antibody, wherein an amino acid residue 46 of L chain V region numbered according to Kabat et al. is a mouse residue and the single chain Fv region creates a functional antigen binding site.

49. The method of claim 48, wherein an amino acid residue 94 of H chain numbered according to Kabat et al. is an additional mouse antibody residue.

50. The method of claim 49, wherein amino acid residues 27, 28, 29 and 30 of H chain numbered according to Kabat et al. are additional mouse antibody residues.

51. The method of claim 48, wherein the amino acid residue 46 is proline.

52. The method of claim 48, wherein the linker peptide has the following amino acid sequence:

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser

53. A single-chain Fv region produced by the method of claim 48.

54. A single-chain Fv region produced by the method of claim 49.

55. A single-chain Fv region produced by the method of claim 50.

56. A single-chain Fv region produced by the method of claim 51.

57. A single-chain Fv region produced by the method of claim 52.